

[4910-13-P]

#### **DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2018-0964; Product Identifier 2018-NM-127-AD; Amendment 39-

19571; AD 2019-03-19]

RIN 2120-AA64

**Airworthiness Directives;** Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems) Airplanes

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Saab AB, Saab Aeronautics Model SAAB 2000 airplanes. This AD was prompted by reports that certain fuel probes indicated misleading fuel quantities on the engine indicating and crew alerting system (EICAS). This AD requires a functional check of certain fuel probes, and replacement with a serviceable part if necessary. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email saab2000.techsupport@saabgroup.com; Internet http://www.saabgroup.com. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0964.

# **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0964; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3220.

#### SUPPLEMENTARY INFORMATION:

#### Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Saab AB, Saab Aeronautics Model SAAB 2000 airplanes. The NPRM published in the <u>Federal Register</u> on November 26, 2018 (83 FR 60374). The NPRM was prompted by reports that certain fuel probes indicated misleading fuel quantities on the EICAS. The NPRM proposed to require a functional check of certain fuel probes, and replacement with a serviceable part if necessary.

We are issuing this AD to address deteriorated capacity of the fuel probes, which could lead to incorrect fuel reading, possibly resulting in fuel starvation and uncommanded engine in-flight shutdown, and consequent reduced control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2018-0187, dated August 29, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Saab AB, Saab Aeronautics Model SAAB 2000 airplanes. The MCAI states:

Occurrences were reported that certain fuel probes, installed on SAAB 2000 aeroplanes, indicated misleading fuel quantities on the engine indicating and crew alerting system (EICAS). The investigation results suggest that this may be an aging phenomenon, leading to deteriorated capacity of the fuel probes.

This condition, if not detected and corrected, could lead to incorrect fuel reading, possibly resulting in fuel starvation and uncommanded engine in-flight shut-down, with consequent reduced control of the aeroplane.

To address this potential unsafe condition, SAAB issued the SB [service bulletin] to provide instructions for a functional check.

For the reason described above, this [EASA] AD requires a one-time functional check of the fuel quantity system and the fuel low level EICAS warnings to determine whether any affected parts are out of tolerance and, depending on findings, replacement of those affected parts.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0964.

#### **Comments**

We gave the public the opportunity to participate in developing this final rule. We received no comments on the NPRM or on the determination of the cost to the public.

## Clarification of Paragraph (g)(2) of this AD

We have removed the words "has reached" from the definition in paragraph (g)(2) of this AD for clarity and to match the MCAI.

#### Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this final rule with the change described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

# Related Service Information under 1 CFR part 51

Saab AB, Saab Aeronautics has issued Service Bulletin 2000-28-028, dated April 19, 2018. This service information describes procedures for a functional check of the fuel indicator gauging accuracy and the low level warning, and for replacing the affected part with a serviceable part if necessary.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

# **Costs of Compliance**

We estimate that this AD affects 8 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

# Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
8 work-hours X \$85 per hour = \$680	\$0	\$680	\$5,440

We estimate the following costs to do any necessary on-condition action that would be required based on the results of any required actions. We have no way of determining the number of aircraft that might need this on-condition action:

# Estimated costs of on-condition action

Labor cost	Parts cost	Cost per product
2 work-hours X \$85 per hour = \$170	\$6,295	\$6,465

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII,
Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress
charges the FAA with promoting safe flight of civil aircraft in air commerce by
prescribing regulations for practices, methods, and procedures the Administrator finds
necessary for safety in air commerce. This regulation is within the scope of that authority
because it addresses an unsafe condition that is likely to exist or develop on products
identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2019-03-19 Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems): Amendment 39-19571; Docket No. FAA-2018-0964; Product Identifier 2018-NM-127-AD.

#### (a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

None.

## (c) Applicability

This AD applies to all Saab AB, Saab Aeronautics (formerly known as Saab AB, Saab Aerosystems) Model SAAB 2000 airplanes, certificated in any category.

# (d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

#### (e) Reason

This AD was prompted by reports that certain fuel probes indicated misleading fuel quantities on the engine indicating and crew alerting system (EICAS). We are issuing this AD to address deteriorated capacity of the fuel probes, which could lead to incorrect fuel reading, possibly resulting in fuel starvation and uncommanded engine in-flight shutdown, and consequent reduced control of the airplane.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Definitions

(1) An affected part is a fuel probe having part number (P/N) 20136-0101, P/N 20136-0102, P/N 20136-0103, P/N 20136-0104, P/N 20136-0105, or P/N 20136-0106; with fuel low level sensors having P/N 20137-0101.

(2) A serviceable part is an affected part that has accumulated less than 1,500 total flight hours or 12 months since first installation on an airplane.

#### (h) Functional Check

Within 1,500 flight hours or 12 months after the effective date of this AD, whichever occurs first, accomplish a functional check of the fuel indicator gauging accuracy and the low level warning, in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-28-028, dated April 19, 2018.

#### (i) Corrective Action

If the functional check required by paragraph (h) of this AD is found to be out of tolerance, within the limits and under the applicable conditions, as specified in the operator's Minimum Equipment List, replace the affected part with a serviceable part, in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-28-028, dated April 19, 2018.

## (j) Parts Installation Limitation

As of the effective date of this AD, no person may install, on any airplane, an affected part, unless it is a serviceable part, as defined in paragraph (g)(2) of this AD.

# (k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International

Section, send it to the attention of the person identified in paragraph (I)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Saab AB, Saab Aeronautics's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

#### (I) Related Information

- (1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2018-0187, dated August 29, 2018, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0964.
- (2) For more information about this AD, contact Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3220.

#### (m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required

by this AD, unless this AD specifies otherwise.

(i) Saab Service Bulletin 2000-28-028, dated April 19, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Saab AB, Saab

Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18

4874; email saab2000.techsupport@saabgroup.com; Internet http://www.saabgroup.com.

(4) You may view this service information at the FAA, Transport Standards

Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of

this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on February 14, 2019.

Michael Kaszycki,

Acting Director,

System Oversight Division,

Aircraft Certification Service.

[FR Doc. 2019-03120 Filed: 2/25/2019 8:45 am; Publication Date: 2/26/2019]

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